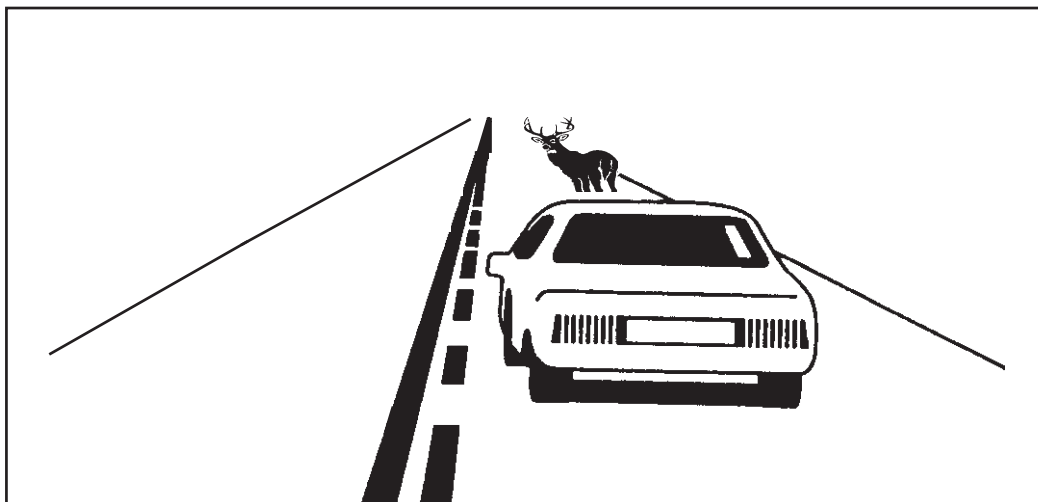


MISSOURI STATE HIGHWAY PATROL



ANALYSIS OF DEER INVOLVEMENT IN MISSOURI TRAFFIC CRASHES 2004

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INTRODUCTION

In recent years, Missouri traffic safety authorities have expressed concern over (1) animal-vehicle crashes involving deer and (2) crashes caused by drivers avoiding deer on roadways. This is one in a series of reports designed to identify the seriousness and characteristics of deer-involved traffic crashes on Missouri's public roadways.

1. METHODOLOGY

To assess the problem of 2004 deer-related traffic crashes in Missouri, two information sources were utilized. In the first instance, data from the National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS) were analyzed. In this analysis, fatal crashes were identified where the first harmful event involved a motor vehicle striking a deer. In addition, fatal crashes were identified where drivers made evasive maneuvers to avoid deer and no deer were struck but their evasive maneuvers contributed to the cause of the traffic crash.

The second source of information used in this study was the Missouri Statewide Traffic Accident Records System (STARS). Using STARS data, all 2004 Missouri traffic crashes where a deer was struck as part of the first harmful event were identified and analyzed (not just fatal crashes). However, this information source was limited in that it did not contain data identifying traffic crashes involving a deer avoidance maneuver where the animal was **not** struck. As a result, analysis could not be conducted on the deer avoidance maneuver problem associated with all Missouri traffic crashes.

2. DISCUSSION OF FINDINGS

The following is a discussion of findings obtained from an analysis of Missouri's 2004 traffic crashes related to deer involvement:

FARS DATA SOURCE

An analysis was conducted of all 2004 Missouri fatal traffic crashes. There were 1,006 such crashes in which 1,130 persons were killed. Four people lost their lives in four fatal crashes involving a vehicle striking a deer and one person died in one crash where deer were avoided.

STARS DATA SOURCE

- In 2004, Missouri had 3,827 traffic crashes where deer-vehicle strikes occurred in the first harmful event. One deer strike occurred every 2.3 hours in the State.
- In 2004, 5 people were killed and 337 injured in these types of crashes. One person was killed or injured every 1.1 days.
- Of all deer strike traffic crashes, 30.0% occurred in an urban area and 70.0% occurred in a rural area of the State. Even though rural areas seem to be overrepresented, the eight highest ranking Missouri counties experiencing this problem are associated with major metropolitan areas. These include: Jackson, St. Louis, Platte, Jefferson, Clay, Boone, St. Charles, and Franklin. Deer strike traffic crashes in these counties account for 40.3% of the total.
- Slightly less than four of five, or 79.8%, of the 2004 deer strike crashes occurred on State-maintained roadways. The greatest proportion occurred on State Numbered Routes (27.0%), followed closely by U.S. Highways (22.5%) and State Lettered Routes (19.0%). An additional 12.3% occurred on city street, 10.5% on Interstates, and 7.1% on county roads.
- Calculations show slightly more than half, or 51.1%, of the 2004 deer strike crashes occurred from October through December, with the largest proportion in November (25.1%). When discussing this with the Missouri Department of Conservation, they suggested the major cause of increased roadway crossings by deer during this period is mating season. The peak occurs about mid-November. In addition, deer hunting season also may cause an increase in roadway crossings. The slight increase in deer-involved crashes noted in the spring months may be attributed to yearling fawns dispersing from their mothers just prior to the arrival of newborns.
- Friday and Sunday were the most likely weekdays for deer strike crashes to occur. Nearly one in three, or 30.7%, occurred on Friday or Sunday in 2004.
- The majority of deer strike crashes occurred from 5:00 p.m. through 6:59 a.m. This time period accounted for 86.7% of the total.
- Of the drivers striking deer, 60.6% were male and 39.4% were female. The average age of the driver was 39.1 years.
- Of the drivers striking deer, 88.0% had a Missouri driver's license, 11.7% had an out-of-state driver's license, and 0.2% were unlicensed at the time of the crash.

3. FINDINGS

The following is a series of tables and figures which characterize Missouri's 2004 deer strike traffic crash problem.

**2004 MISSOURI FATAL TRAFFIC CRASHES
DEER INVOLVEMENT¹**

TYPE OF CRASH	FATAL CRASHES	%	FATALITIES
DEER-VEHICLE STRIKE	4	0.4	4
AVOIDING DEER	1	0.1	1
NO INVOLVEMENT	1,001	99.5	1,125
STATE TOTAL	1,006	100.0	1,130

TABLE 1

¹Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

2004 MISSOURI TRAFFIC CRASHES

DEER STRIKE INVOLVEMENT

	FATAL		PERSONAL INJURY		PROPERTY DAMAGE		TOTAL	%	TOTAL		%	TOTAL NUMBER ¹		DRIVERS/PASSENGERS OF VEHICLES STRIKING DEER ²	
												KILLED	INJURED	KILLED	INJURED
DEER INVOLVED	5	0.5	278	0.6	3,544	2.6	3,827	2.1	5	337	4	324			
OTHER INVOLVEMENT	1,001	99.5	45,573	99.4	131,842	97.4	178,416	97.9	1,125	68,336	-	-			
TOTAL	1,006	100.0	45,851	100.0	135,386	100.0	182,243	100.0	1,130	68,673	4	324			

¹This statistic indicates the total number of persons killed and injured in a crash where a deer was struck during the first harmful event in a crash.

²This statistic indicates the number of drivers and passengers of vehicles striking deer during the first harmful event in a crash who were killed and injured.

TABLE 2

MISSOURI TRAFFIC SAFETY DEER INVOLVEMENT
PROBLEM ANALYSIS CLOCK

2004

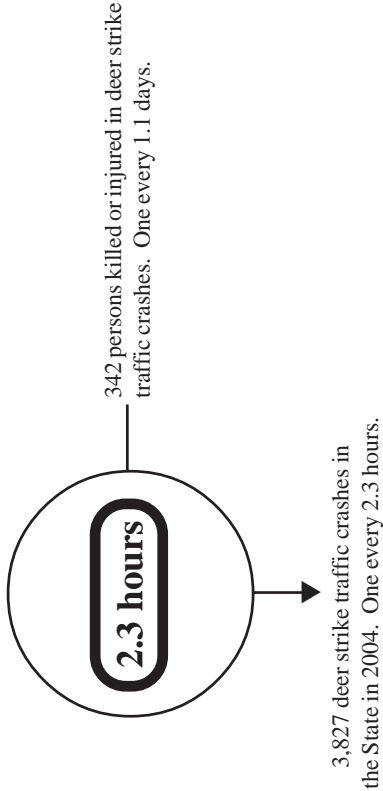


FIGURE 1

2004 MISSOURI DEER CRASHES

AREA CLASSIFICATION BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
URBAN	0	0.0	69	24.8	1,081	30.5	1,150	30.0
RURAL	5	100.0	209	75.2	2,463	69.5	2,677	70.0
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

TABLE 3

2004 MISSOURI DEER CRASHES

ROAD CURVATURE BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
STRAIGHT	4	80.0	227	81.7	2,434	88.7	2,665	88.1
CURVE	1	20.0	51	18.3	309	11.3	361	11.9
UNKNOWN	0	-	0	-	801	-	801	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

TABLE 4

2004 MISSOURI DEER CRASHES

ROAD INCLINE BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
LEVEL	3	60.0	160	58.0	1,727	63.5	1,890	63.0
HILL	2	40.0	104	37.7	924	34.0	1,030	34.3
CREST	0	0.0	12	4.3	69	2.5	81	2.7
UNKNOWN	0	-	2	-	824	-	826	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

TABLE 5

2004 MISSOURI DEER CRASHES

ROAD CONDITIONS BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
DRY	1	20.0	48	17.4	551	20.2	600	19.9
WET	4	80.0	224	81.2	2,142	78.6	2,370	78.8
SNOW	0	0.0	0	0.0	0	0.0	0	0.0
ICE	0	0.0	2	0.7	24	0.9	26	0.9
SLUSH	0	0.0	0	0.0	0	0.0	0	0.0
MUD	0	0.0	2	0.7	9	0.3	11	0.4
STANDING WATER	0	0.0	0	0.0	0	0.0	0	0.0
MOVING WATER	0	0.0	0	0.0	0	0.0	0	0.0
UNKNOWN	0	-	2	-	818	-	820	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

TABLE 6

2004 MISSOURI DEER CRASHES

HIGHWAY CLASSIFICATION BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
INTERSTATE	0	0.0	25	9.0	377	10.6	402	10.5
U.S. HIGHWAY	1	20.0	67	24.1	791	22.3	859	22.5
STATE NUMBERED	1	20.0	90	32.4	944	26.6	1,035	27.0
SINGLE STATE LETTERED	1	20.0	38	13.7	507	14.3	546	14.3
DOUBLE STATE LETTERED	1	20.0	10	3.6	170	4.8	181	4.7
OUTER ROAD	0	0.0	1	0.4	26	0.7	27	0.7
COUNTY ROAD	1	20.0	22	7.9	249	7.0	272	7.1
CITY STREET	0	0.0	23	8.3	449	12.7	472	12.3
INTERSTATE LOOP	0	0.0	0	0.0	2	0.1	2	0.1
OTHER ¹	0	0.0	2	0.7	29	0.8	31	0.8
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

¹ "Other" includes types of roads that are maintained by the State as well as by local jurisdictions.

TABLE 7

2004 MISSOURI DEER CRASHES

HIGHWAY CLASSIFICATION BY AREA CLASSIFICATION AND CRASH SEVERITY

	URBAN							RURAL								
	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
INTERSTATE	0	0.0	10	14.5	127	11.8	137	11.9	0	0.0	15	7.2	250	10.2	265	9.9
U.S. HIGHWAY	0	0.0	9	13.0	187	17.3	196	17.0	1	20.0	58	27.8	604	24.5	663	24.8
STATE NUMBERED	0	0.0	23	33.3	235	21.7	258	22.4	1	20.0	67	32.1	709	28.8	777	29.0
SINGLE STATE LETTERED	0	0.0	3	4.4	35	3.2	38	3.3	1	20.0	35	16.8	472	19.2	508	19.0
DOUBLE STATE LETTERED	0	0.0	2	2.9	27	2.5	29	2.5	1	20.0	8	3.8	143	5.8	152	5.7
OUTER ROAD	0	0.0	0	0.0	8	0.7	8	0.7	0	0.0	1	0.5	18	0.7	19	0.7
COUNTY ROAD	0	0.0	2	2.9	43	4.0	45	3.9	1	20.0	20	9.6	206	8.4	227	8.5
CITY STREET	0	0.0	19	27.5	405	37.5	424	36.9	0	0.0	4	1.9	44	1.8	48	1.8
INTERSTATE LOOP	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	1	0.0	1	0.0
OTHER ¹	0	0.0	1	1.5	13	1.2	14	1.2	0	0.0	1	0.5	16	0.7	17	0.6
TOTAL	0	0.0	69	100.0	1,081	100.0	1,150	100.0	5	100.0	209	100.0	2,463	100.0	2,677	100.0

¹ "Other" includes types of roads that are maintained by the State as well as by local jurisdictions.

TABLE 8

**2004 MISSOURI DEER CRASHES
MONTH OF YEAR**

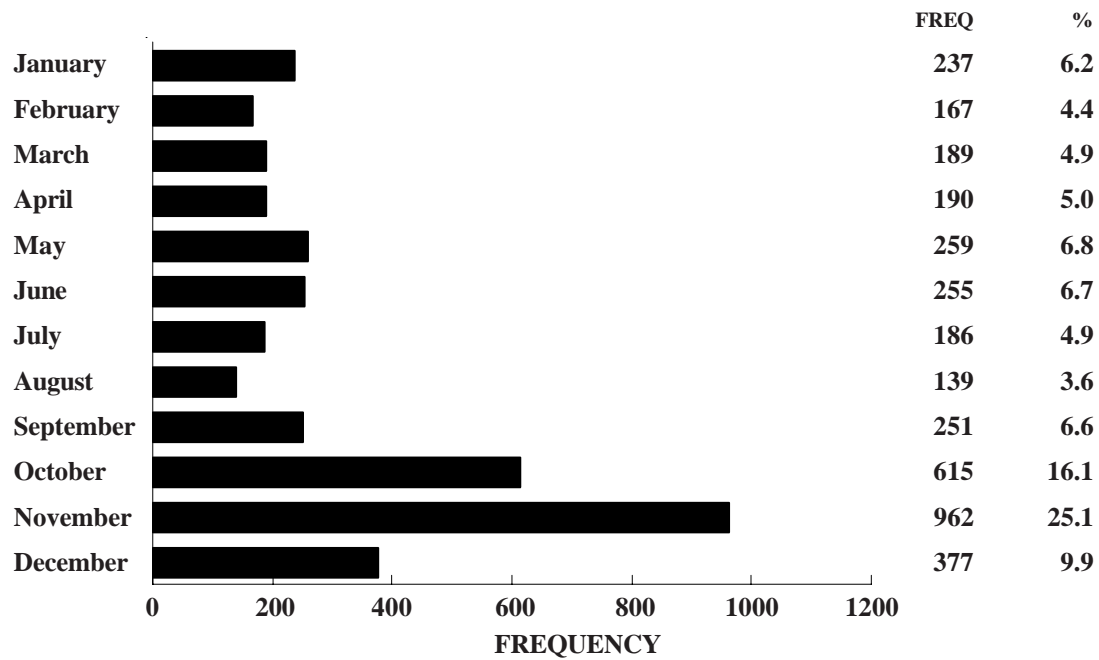


FIGURE 2

**2004 MISSOURI DEER CRASHES
DAY OF WEEK**

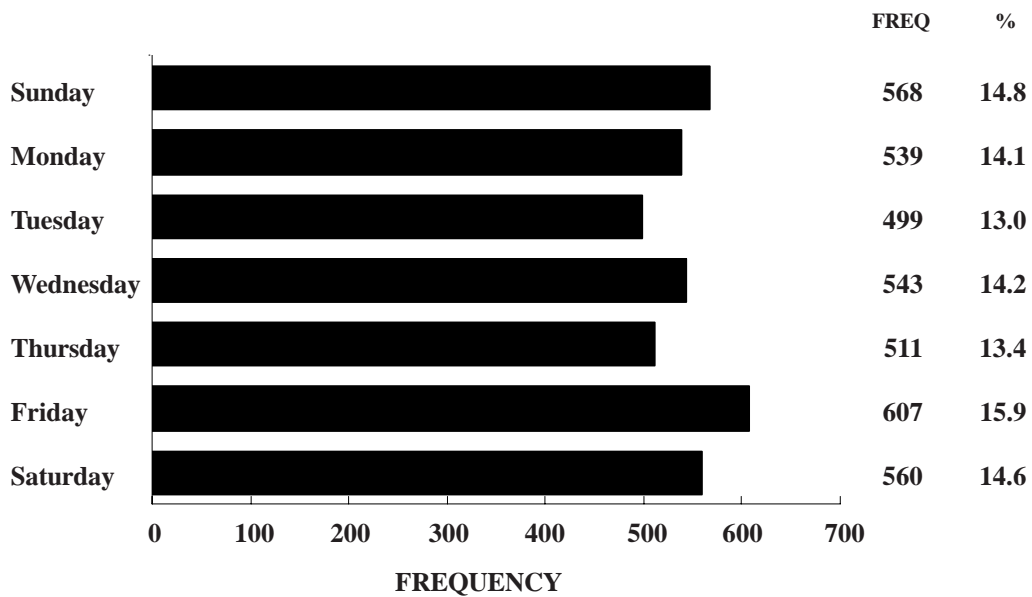


FIGURE 3

**2004 MISSOURI DEER CRASHES
HOUR OF DAY**

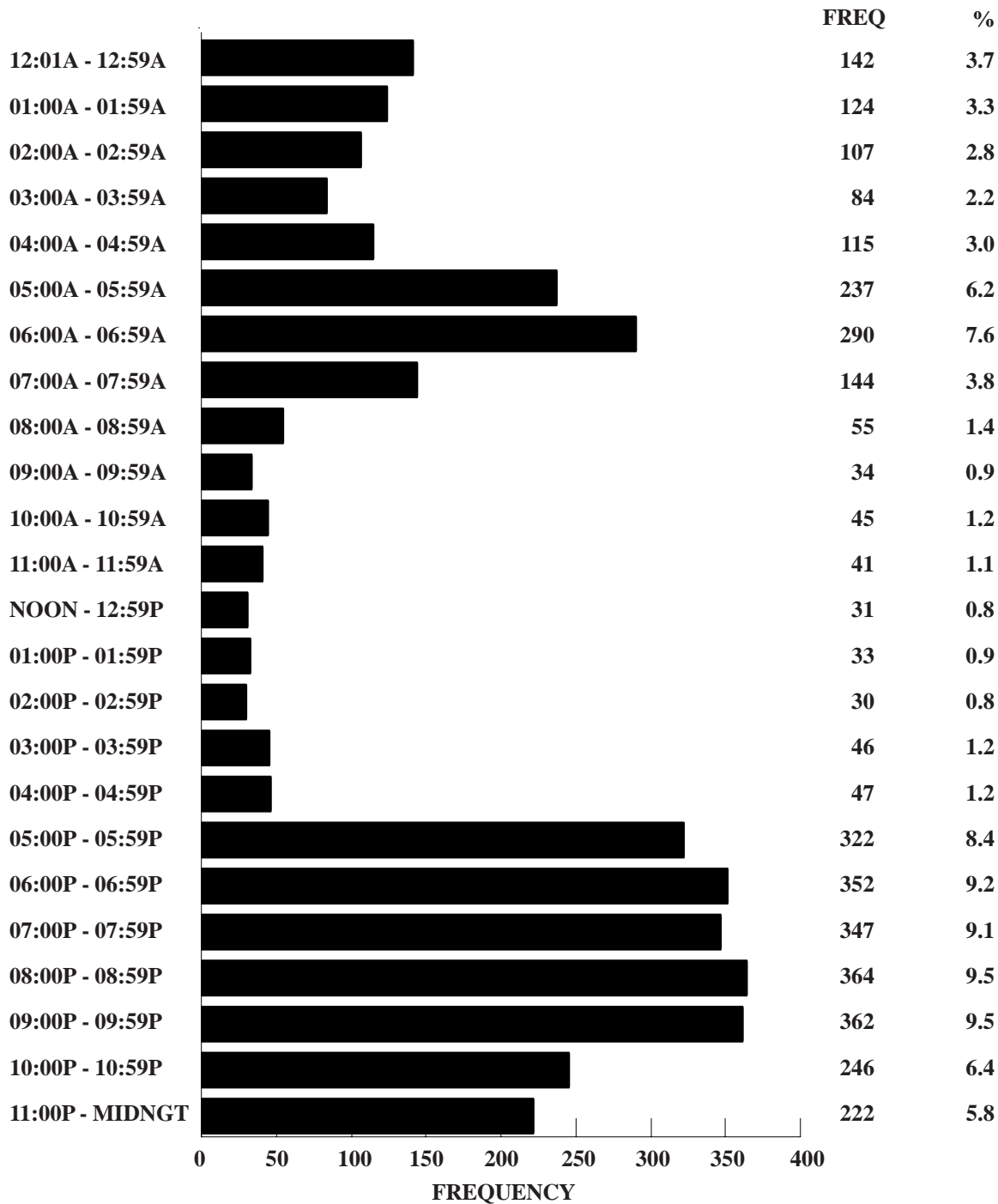


FIGURE 4

Unknown Data Not Included

2004 MISSOURI DEER CRASHES¹

TYPE OF VEHICLE STRIKING DEER BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
AUTOMOBILE	0	0.0	146	52.5	1,823	51.5	1,969	51.5
SPORT UTILITY VEHICLE	0	0.0	22	7.9	545	15.4	567	14.8
LIMOUSINE	0	0.0	0	0.0	0	0.0	0	0.0
VAN	0	0.0	25	9.0	362	10.2	387	10.1
BUS	0	0.0	0	0.0	3	0.1	3	0.1
SCHOOL BUS	0	0.0	0	0.0	3	0.1	3	0.1
MOTORCYCLE	4	80.0	47	16.9	3	0.1	54	1.4
MOPED	0	0.0	0	0.0	0	0.0	0	0.0
MOTORHOME/CAMPER	0	0.0	0	0.0	0	0.0	0	0.0
FARM EQUIPMENT	0	0.0	0	0.0	0	0.0	0	0.0
CONSTRUCTIONEQUIPMENT	0	0.0	0	0.0	0	0.0	0	0.0
OTHER TRANSPORT DEVICE	0	0.0	0	0.0	4	0.1	4	0.1
PICK-UP TRUCK	1	20.0	34	12.2	699	19.7	734	19.2
OTHER TRUCKS	0	0.0	2	0.7	100	2.8	102	2.7
ALL TERRAIN VEHICLE	0	0.0	2	0.7	0	0.0	2	0.1
UNKNOWN	0	-	0	-	2	-	2	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

¹This table includes only those vehicles striking a deer during the first harmful event in a crash.

TABLE 9

VEHICLES STRIKING DEER IN 2004 MISSOURI CRASHES¹

DRIVER INVOLVEMENT BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
DRIVERLESS	0	0.0	0	0.0	0	0.0	0	0.0
KNOWN DRIVER INVOLVED	5	100.0	277	99.6	3,540	99.9	3,822	99.9
UNKNOWN DRIVER INVOLVED	0	0.0	1	0.4	4	0.1	5	0.1
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

¹This table includes only vehicles striking deer during the first harmful event in a crash.

TABLE 10

DRIVERS OF VEHICLES STRIKING DEER IN 2004 MISSOURI CRASHES¹

SEX OF DRIVER BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
MALE	5	100.0	152	54.9	1,789	61.1	1,946	60.6
FEMALE	0	0.0	125	45.1	1,138	38.9	1,263	39.4
UNKNOWN	0	-	1	-	617	-	618	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

¹The table includes only drivers of vehicles striking deer during the first harmful event in a crash.

TABLE 11

DRIVERS OF VEHICLES STRIKING DEER IN 2004 MISSOURI CRASHES¹

AGE OF DRIVER BY CRASH SEVERITY

	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
AVERAGE AGE OF DRIVER	27.2	-	38.4	-	39.1	-	39.1	-
14 YEARS AND UNDER	0	0.0	0	0.0	0	0.0	0	0.0
15 - 20 YEARS	0	0.0	38	14.0	308	8.8	346	9.1
21 - 25 YEARS	2	40.0	39	14.3	452	12.9	493	13.0
26 - 30 YEARS	1	20.0	22	8.1	368	10.5	391	10.3
31 - 35 YEARS	2	40.0	30	11.0	384	10.9	416	11.0
36 - 40 YEARS	0	0.0	22	8.1	410	11.7	432	11.4
41 - 45 YEARS	0	0.0	30	11.0	417	11.9	447	11.8
46 - 50 YEARS	0	0.0	26	9.6	401	11.4	427	11.3
51 - 55 YEARS	0	0.0	27	9.9	305	8.7	332	8.8
56 - 60 YEARS	0	0.0	10	3.7	188	5.4	198	5.2
61 - 65 YEARS	0	0.0	16	5.9	132	3.8	148	3.9
66 YEARS AND OVER	0	0.0	12	4.4	144	4.1	156	4.1
UNKNOWN	0	-	6	-	35	-	41	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

¹This table includes only drivers of vehicles striking deer during the first harmful event in a crash.

TABLE 12

DRIVERS OF VEHICLES STRIKING DEER IN 2004 MISSOURI CRASHES¹

DRIVER'S LICENSE STATE AND TYPE BY CRASH SEVERITY

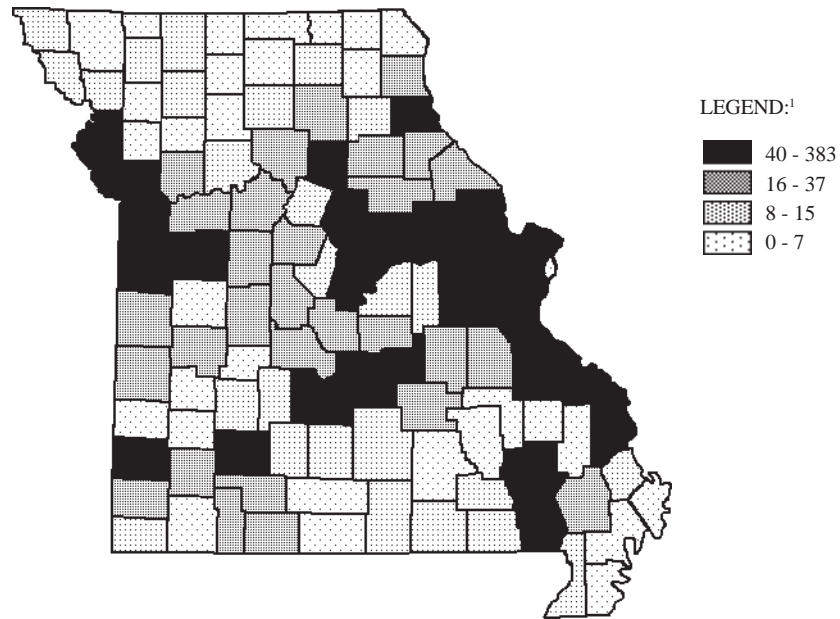
	FATAL	%	PERSONAL INJURY	%	PROPERTY DAMAGE	%	TOTAL	%
MISSOURI								
LEARNER'S PERMIT	0	0.0	0	0.0	6	0.2	6	0.2
OPERATOR'S LICENSE	4	80.0	229	82.7	2,196	80.7	2,429	80.8
MOTORCYCLE ONLY	0	0.0	0	0.0	0	0.0	0	0.0
COMMERCIAL DRIVER'S LICENSE	0	0.0	19	6.9	191	7.0	210	7.0
SUB-TOTAL	4	80.0	248	89.5	2,393	87.9	2,645	88.0
OUT STATE								
LEARNER'S PERMIT	0	0.0	0	0.0	1	0.0	1	0.0
OPERATOR'S LICENSE	0	0.0	23	8.3	280	10.3	303	10.1
MOTORCYCLE ONLY	0	0.0	0	0.0	0	0.0	0	0.0
COMMERCIAL DRIVER'S LICENSE	0	0.0	3	1.1	46	1.7	49	1.6
SUB-TOTAL	0	0.0	26	9.4	327	12.0	353	11.7
UNLICENSED	1	20.0	3	1.1	3	0.1	7	0.2
UNKNOWN	0	-	1	-	821	-	822	-
TOTAL	5	100.0	278	100.0	3,544	100.0	3,827	100.0

¹This table includes only drivers of vehicles striking deer during the first harmful event in a crash.

TABLE 13

2004 MISSOURI DEER CRASHES

COUNTY QUARTILE ANALYSIS



¹LEGEND CATEGORIES ARE BASED ON QUARTILES OF COUNTIES.

RANK	COUNTY	FREQUENCY	PERCENT	RANK	COUNTY	FREQUENCY	PERCENT
1.0	JACKSON	383	10.0	21.5	STE. GENEVIEVE	49	1.3
2.0	ST. LOUIS	203	5.3	23.0	MARION	46	1.2
3.0	PLATTE	197	5.1	24.0	WAYNE	42	1.1
4.0	JEFFERSON	181	4.7	26.0	BUTLER	41	1.1
5.0	CLAY	180	4.7	26.0	MONTGOMERY	41	1.1
6.0	BOONE	175	4.6	26.0	PERRY	41	1.1
7.0	ST. CHARLES	134	3.5	28.5	BUCHANAN	40	1.0
8.0	FRANKLIN	91	2.4	28.5	GREENE	40	1.0
9.0	ST. FRANCOIS	86	2.2	First Quartile			
10.0	JOHNSON	81	2.1	Second Quartile			
11.5	CASS	79	2.1	30.0	PETTIS	37	1.0
11.5	LINCOLN	79	2.1	31.5	MORGAN	35	0.9
13.0	COLE	62	1.6	31.5	NEWTON	35	0.9
14.0	WARREN	59	1.5	33.0	COOPER	34	0.9
15.5	CALLAWAY	57	1.5	34.0	VERNON	33	0.9
15.5	RANDOLPH	57	1.5	35.5	CAMDEN	30	0.8
17.0	PHELPS	56	1.5	35.5	TANEY	30	0.8
18.0	CAPE GIRARDEAU	53	1.4	37.5	CRAWFORD	28	0.7
19.5	JASPER	51	1.3	37.5	ST. CLAIR	28	0.7
19.5	PULASKI	51	1.3	39.0	MACON	27	0.7
21.5	LACLEDE	49	1.3				

RANK	COUNTY	FREQUENCY	PERCENT	RANK	COUNTY	FREQUENCY	PERCENT
41.0	BENTON	24	0.6	78.5	HOWARD	9	0.2
41.0	DENT	24	0.6	78.5	POLK	9	0.2
41.0	MILLER	24	0.6	78.5	WRIGHT	9	0.2
43.5	MONROE	23	0.6	82.5	ATCHISON	8	0.2
43.5	RAY	23	0.6	82.5	DAVISS	8	0.2
45.0	MARIES	22	0.6	82.5	MONITEAU	8	0.2
46.5	LEWIS	21	0.5	82.5	OREGON	8	0.2
46.5	PIKE	21	0.5	Third Quartile			
49.5	AUDRAIN	20	0.5	Fourth Quartile			
49.5	LAFAYETTE	20	0.5	87.5	BARRY	7	0.2
49.5	STODDARD	20	0.5	87.5	BARTON	7	0.2
49.5	STONE	20	0.5	87.5	DOUGLAS	7	0.2
53.0	BATES	19	0.5	87.5	KNOX	7	0.2
53.0	CHRISTIAN	19	0.5	87.5	MADISON	7	0.2
53.0	RALLS	19	0.5	87.5	SCHUYLER	7	0.2
55.5	SALINE	18	0.5	92.5	DE KALB	6	0.2
55.5	WASHINGTON	18	0.5	92.5	HENRY	6	0.2
57.0	LAWRENCE	17	0.4	92.5	MISSISSIPPI	6	0.2
58.0	CHARITON	16	0.4	92.5	NEW MADRID	6	0.2
Second Quartile				96.0	GRUNDY	5	0.1
Third Quartile				96.0	NODAWAY	5	0.1
60.0	GASCONADE	15	0.4	96.0	REYNOLDS	5	0.1
60.0	HARRISON	15	0.4	98.5	CALDWELL	4	0.1
60.0	HOWELL	15	0.4	98.5	CEDAR	4	0.1
62.5	DALLAS	14	0.4	104.0	CLARK	3	0.1
62.5	MC DONALD	14	0.4	104.0	CLINTON	3	0.1
66.5	CARTER	13	0.3	104.0	DADE	3	0.1
66.5	DUNKLIN	13	0.3	104.0	IRON	3	0.1
66.5	GENTRY	13	0.3	104.0	LIVINGSTON	3	0.1
66.5	HOLT	13	0.3	104.0	OZARK	3	0.1
66.5	LINN	13	0.3	104.0	PEMISCOT	3	0.1
66.5	WEBSTER	13	0.3	104.0	SHANNON	3	0.1
70.5	OSAGE	12	0.3	104.0	SULLIVAN	3	0.1
70.5	RIPLEY	12	0.3	110.0	BOLLINGER	2	0.1
72.0	TEXAS	11	0.3	110.0	WORTH	2	0.1
74.5	ANDREW	10	0.3	110.0	ST. LOUIS CITY	2	0.1
74.5	CARROLL	10	0.3	112.5	PUTNAM	1	0.0
74.5	SCOTT	10	0.3	112.5	SCOTLAND	1	0.0
74.5	SHELBY	10	0.3	114.5	HICKORY	0	0.0
78.5	ADAIR	9	0.2	114.5	MERCER	0	0.0

TABLE 14

2004 MISSOURI DEER CRASHES

CITY LISTING

RANK	CITY	FREQUENCY	PERCENT ¹
1.0	KANSAS CITY	297	22.0
2.0	LEE'S SUMMIT	79	5.9
3.0	COLUMBIA	49	3.6
4.0	INDEPENDENCE	39	2.9
5.0	CHESTERFIELD	34	2.5
6.0	LIBERTY	27	2.0
7.0	JEFFERSON CITY	26	1.9
8.0	CAPE GIRARDEAU	25	1.9
9.5	ST. JOSEPH	24	1.8
9.5	WILDWOOD	24	1.8
11.5	JOPLIN	22	1.6
11.5	SPRINGFIELD	22	1.6
13.0	GRANDVIEW	21	1.6
14.0	MARYLAND HEIGHTS	20	1.5
15.5	BLUE SPRINGS	19	1.4
15.5	WARRENSBURG	19	1.4
17.5	PARKVILLE	17	1.3
17.5	WENTZVILLE	17	1.3
19.0	SUNSET HILLS	16	1.2
21.0	JACKSON	15	1.1
21.0	MOBERLY	15	1.1
21.0	OSAGE BEACH	15	1.1
23.5	BELTON	14	1.0
23.5	FULTON	14	1.0
25.5	HANNIBAL	13	1.0
25.5	HARRISONVILLE	13	1.0
27.5	NEOSHO	12	0.9
27.5	WARRENTON	12	0.9
29.0	BRANSON	11	0.8
30.5	BOONVILLE	10	0.7
30.5	PEVELY	10	0.7
34.0	LAKE ST. LOUIS	9	0.7
34.0	O'FALLON	9	0.7
34.0	ROLLA	9	0.7
34.0	ST. CHARLES	9	0.7
34.0	ST. PETERS	9	0.7
38.5	CREVE COEUR	8	0.6
38.5	LAKE LOTAWANA	8	0.6
38.5	MANCHESTER	8	0.6
38.5	RIVERSIDE	8	0.6
45.0	ARNOLD	7	0.5
45.0	FENTON	7	0.5
45.0	LAKE OZARK	7	0.5
45.0	MOSCOW MILLS	7	0.5
45.0	OZARK	7	0.5
45.0	PACIFIC	7	0.5
45.0	RAYTOWN	7	0.5
45.0	TOWN AND COUNTRY	7	0.5
45.0	WRIGHT CITY	7	0.5

¹Percentage is based on deer involved crashes which occurred in Missouri municipalities with populations of 1,000 or more. Only those municipalities comprising 0.5% or more of these crashes are listed.

TABLE 15